## Structural biases in prudential regulation of banks<sup>\*</sup>

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## 1. Introduction

Since the late 1980s financial systems have gradually gone through profound changes in their regulatory framework. The most notable trait of this evolution is convergence towards some basic principles laid down by the Basle Committee on Banking Supervision.

Previously there had been significant differences in national financial regulation. Different approaches to national regulations stemming from the 1930s financial crisis contributed to heighten the diversification of financial morphologies in the following decades. These different approaches could be justified by the need to tailor financial regulation to national identities as emerging from the various historical backgrounds and from the different solutions applied to the 1930s crisis, especially in a period of weakened international openness.

While some countries opted not to introduce limits in banking morphology, a new set of prohibitions came to characterise other national regulatory systems, aiming at keeping banks in safer waters. Building on the financial crises experienced prior to the 1930s, banks came to be seen as both a necessary and a dangerous component of the financial system, thus needing to be isolated from riskier activities and excessive competition, Paraphrasing Ralph Hawtrey, we can say that banking was seen as an art, and since artists are in short supply, it was better to strengthen the traditional conservative approach to banking. Furthermore, in view of potential severe distortion in bank operations due to conflicts of interests, it was deemed advisable to adopt strict limits at the level of the banks'

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corporate governance structure. Public ownership of banks, common in Europe, could also be seen as a way to tackle problems related to the corporate governance of and by banks.

The increased internationalisation of the last few decades, particularly marked in the financial sphere, has changed the picture. Banks subject to different national regulatory and market mechanisms have had to compete on unequal bases in the international context. In addition, the increasingly crucial international role assumed by banks was considered, especially after Latin America's debt moratoria of the 1980s, in contrast with the perceived long run tendency to a decreasing bank capitalisation.

At the national level, significant distortions were also imputed to the financial regulation based on prohibitions, i.e. to the so-called structural regulation. Competition was low, and a quiet life favoured inefficiencies of all sorts; risk culture declined and ample discretionary powers were used by the national authorities to distort market mechanisms while public ownership distorted competition and fostered cronyism.

A new common regulatory culture then emerged, based on free competition both inside the banking sector and in the financial system at large. This means the elimination of strict limits on banking operations, abandonment of the specialisation principle between commercial banking and financial non-bank activity, privatisation and banks coming under firmer market discipline, also at the level of their corporate governance, all of which obviously exposes banks to a wider set of risks. This deregulation was then supplemented by reregulation of a so-called prudential nature. In came the Basle approach, based on three pillars: minimum capital requirements, supervision and market discipline. Presenting its recent proposal for a new Accord (Basle 2), the Committee asserted that

"the total amount of bank capital [...] is vital in reducing the risk of bank insolvency and the potential cost of a bank's failure for depositors. Building on this, the new framework intends to improve safety and soundness in the financial system by placing more emphasis on banks' own internal control and management, the supervisory review process, and market discipline" (BCBS, 2001, p. 1).

One important general aspect is, however, to be considered. Where in place, structural regulation was primarily designed for preventing and

dealing with systemic financial crises. At a micro level, it shielded banks from excessive risk-taking and excessive competition. At a macro level it was supplemented by the central bank acting as lender of last resort. In the USA it was, and still is, also supplemented by a deposit insurance backed by the Treasury. Further protection came from large-scale government spending, able to set a lower limit to the fall of national income and total profits.

In evaluating the current trend in bank regulation we have then to address three issues. The points to be determined are whether the Basle approach needs to be supplemented by systemic protections against financial crises, whether it offers net advantages over the previous system, especially in terms of regulatory costs and of distortions induced in banking practices, and whether it can be safely generalised to all banks and all countries.

# 2. The microeconomic nature of the Basle approach and its implications

Despite the above reference to the financial system, the Basle approach is strictly microeconomic in nature. In other words, it tackles problems of systemic fragility and instability only to the extent that the sum of more resilient banks enhance the strength of the systems as a whole. There are two possible explanations for the Basle Committee adopting such a partial view. The first is that the Committee focuses primarily on (large) international banks belonging to the more developed countries;<sup>1</sup> the second is that, as its attention is restricted to the banking sector and minimum regulatory requirements, systemic problems may be thought as left to be tackled by the national or regional authorities.

Here is where Europe parts company with the USA. The latter keeps a clear design where the lender of last resort by the Fed and the deposit insurance backed by the Treasury remain the two tried and tested tools to counter domestic systemic crises. On the contrary, Europe forbids public

<sup>&</sup>lt;sup>1</sup> Basle 2 is, however, less cautious since it now seems to take as a datum the subsequent generalisation of its recommendations to all banks and all countries.

schemes of deposit insurance and the European Central Bank is not equipped to act as a serious lender of last resort. For the USA the centre-pieces of domestic regulation are the lender of last resort and the deposit insurance scheme, while the three pillars of the Basle regulation may be seen as among the measures necessary to contain the moral hazard effects and social costs stemming from these two core tools. Europe, like many other countries, has to rely only on the Basle pillars, and we shall therefore be focusing on the Basle approach in the following pages.

Since recent experience shows that financial crises have not spared the post-1988 Basle Accord period, we must face up to systemic financial fragility and instability and the effect on the economy of the current approach to financial regulation. Regulation should be the response not to individual problems but to serious ones related to public goods; furthermore, rules should be geared so as to fight the specific causes of potential dangers and/or to limit their effects on the system; finally, the theorem of second best warns that the best sub-optimal solution may not be attained simply by attenuating some of the existing imperfections. In other words, a global approach is required.

## 3. Different views on systemic financial fragility and the role of banks

If we are to evaluate the effects of a decade of application of the First Basle Accord and of the new proposals, we should have clear ideas on the causes of financial fragility, and then go on to analyse how the specific set of regulations comply with the above theoretical rules.

A radical view sees financial instability as the product of the mere existence of commercial banking, with banks treated as dinosaurs saved from extinction by legal restrictions and the backing of public money. Bank operations are opaque and by their very nature subject to mismanagement; bank runs, with their disruptive effects on the payment system and credit, are a serious potential threat. This means that the role of financial intermediation should lie in keeping transaction and information costs low, while risks should be directly borne by ultimate financial investors. A resilient financial system must therefore be based on the capital market and on those non-bank financial institutions that render it efficient; hence proposals aiming at imposing a different set of legal restrictions, this time on the obligation of backing money-deposits with liquid assets or vetoing sight fixed-value deposits. A second piece of regulation should impose a high level of competition and transparency. This view has been strengthened by the experience of the last decade, characterised by a considerable shift from bank deposits to assets traded in the capital markets. As the story goes, when and where competition has been freed the best solution tends to emerge: a questionable point of view, but coherent.

A different view sees fragility as inherent to the financial system, independently of its morphology. The problem lies with the financial system being a substitute for a perfect and complete set of commodity futures markets that uncertainty and the dynamic nature of capitalism do not allow. As substitutes, financial markets are imperfect by definition and subject not to validate past decisions taken on the basis of an uncertain knowledge. Different morphologies may produce different types of financial fragility and instability, and may differently serve the economic system in "normal" times. In the light of this observation we can analyse two extreme solutions of financial morphology, one based exclusively on banks, the other solely on capital markets. Each has its own merits and shortcomings. In the middle we have an infinite variety of combinations that prove market – or bank – oriented according to the place they occupy in the spectrum. We might argue that the spectrum is not a continuous one, since near the extremes the dominance of one sub-system is so strong that it tends to impede the viability of the other. A particular version of this view sees intermediate solutions as likely to benefit from the positive aspects of both sub-systems. For example, it is argued that by their very nature capital markets cannot work with the hundreds of thousands of medium and small firms, given the lack of reliable public information on these firms and their sheer number. Alan Greenspan (2000) recently remarked that

"history teaches us that a sound banking system [...] is a prerequisite for the long-term health of the national economy. Securities markets alone will never be able to substitute for the extensive and detailed knowledge that bankers [...] bring to the intermediation process."

It is also suggested that when a confidence shock hits the capital market a large credit crunch is avoided if the banks are there to assist as buffers, and vice versa. We should then logically infer that regulation should address the most serious specific shortcomings of the two sub-systems and of their mutual interaction.

## 4. The Basle approach on capital requirements: a critical evaluation

Where does the Basle approach stand? It certainly does not propose the abolition of commercial banking; banks and bankers are, however, seen as schoolchildren to be taught good manners and the rudimentary elements of their profession, also with the essential help of capital punishments (markets). It might well be that the justification for consolidation in the banking sector is to be seen in the fact that we are short of good bankers. As far as the Basle rules are based on improving good manners and a banking culture, we should see them tending to improve the corporate governance of and by banks. Minimum capital requirements (first pillar) and market discipline (third pillar) should solve the agency problem posed by the lack of control by depositors and by the inefficacy of takeover threats; supervision (second pillar) should force a risk culture; competition (zero pillar) should guarantee the dynamic survival of the fittest (if we are to give any credit to such simplistic theories).

Capital requirements actually bear most of the weight of regulation and, unfortunately, these are the very rules most open to serious criticism. First, if the problem is to force banks towards a higher capitalisation, the solution should be much simpler, namely to make the cost of capital lower than the cost of debt. The fiscal system, as Modigliani and Miller taught us long ago, is there just for such tricks. As for financial investors, apart from pointing to stronger rules for the protection of shareholders, the current tendency to higher taxation of interests with respect to rents from capital should be confirmed and strengthened. But, crucially, banks should be completely freed of taxes for all funds that directly or indirectly go to self-financing.

Second, what does a risk-sensitive 8% rate mean? As experience shows, this does not represent an effective cushion for limiting the losses for depositors. We must therefore suppose that, as long as capital remains more costly than debt, linking capital to risks has the purpose of increasing the charges for riskier lending. Let us follow the - indeed heroic assumption that the system works. What about its effects on the economy? If it is true that hundreds of thousands of borrowers have no alternative to bank lending, it is they who effectively pay for the cost of this regulation. The distance of a few large international banks operating with important borrowers (the initial target of Basle 1) from the conditions of national and regional economies, where firms that have no access to capital markets produce about 50% of GDP, could not be more evident. Are we so sure that past banking crises were produced by defaults on debt due to this category of borrowers? Highly unlikely. A new term has been created for the potential effects of bank capital regulation on these borrowers: capital crunch.

Third, the rationale for extending the Basle rule on capitalisation to all banks is the creation of a level playing field. The approach seems based on sound common sense: leave everyone free to take the risks they like, but spot risks where they are allocated and tax them with a flat rate. What could be more coherent for an open competitive environment? Unfortunately, sound economics and sound common sense often part company. In the capital market circuit risks are entirely borne by savers; since regulators have not yet found the way to cross the threshold of our homes, this level playing field produces distortions for the stability of the entire system if, as we may suppose, the savers' ability to evaluate risks and their response to losses is no better than the banks'.

An even more important problem is at issue, however. As Shaefer (1991) showed, it is the very concept of the level playing field that comes under fire when we start from the theoretical justification of regulation. If the minimum capital requirement must be geared to the negative externalities produced by the failure of a financial intermediary, we must recognise that systemic externalities from bankruptcy differ for different typologies of intermediaries, for banks of different size and for systems differently based on bank intermediation. The eventual failure of the Banca

di Credito Cooperativo di Monteriggioni, a very small bank operating in a rural area near Siena, would have no systemic effects on the Italian financial and economic systems: no chain reaction would start: and since this bank is a member of the Italian private scheme for deposit insurance, depositors are protected and no additional regulatory tax should be levied. If we take the case of the largest Italian banks the opposite is true: the private deposit insurance scheme is underfunded to meet a failure of such dimensions: the systemic financial and economic effects would be vast; we clearly need a plus of systemic protection. As a consequence the level playing field approach is theoretical nonsense, even though politically palatable. Worse, it helps to reinforce the moral hazard in the form of "too big to fail." Competitive regulatory conditions and systemic protection for risks are at odds. Would we allow competition to build three gigantic nuclear power plants inside a single precinct of five square miles? Should we impose the same regulatory flat rate, deduced from individual risks, if the three power plants were built in the same location or well apart?

## 5. The myth of the level playing field

It is useful to recall the logic, or at least the formal justification, of the initial Basle Capital Accord. The scheme was devised for internationally operating banks belonging to the G10 countries. The capital requirement was based on the existence of several preconditions. International banks were considered sufficiently adept in evaluating the risks of their portfolio, making provisions for future risks and in making prompt write-offs when necessary, and they were based in countries whose legal systems allow for the enforcement of contractual obligations at low costs. The major drawback was seen in their tendency to low capitalisation. Being large banks, their failure would have produced important negative externalities or, as experience shows, their bailout would have produced heavy social costs and international political problems as to their sharing out.

The mythology of the level playing field seems a later invention, when the scheme was applied to all banks and, as a tendency, to all countries. With the idea of freeing the forces of competition also at the national and regional level, it seemed convenient to extend the adoption of the Accord. Insufficient attention was initially given to the fact that the above preconditions could not be equally present in all banks and in all countries. As later experience of bank crises served as a reminder of this slip-up, two tendencies emerged.

On the one hand, the regulation was made increasingly complex in the endeavour to cope with the initial error and the ingenuity of the banks in eluding the rules. The result recalls the story of the Ptolemaic representation of the solar system which, in the face of increasing discrepancies with observation, was made ever more complex, thus increasing confusion instead of eliminating all the discrepancies. Moreover, greater complexity means higher regulatory costs to be borne by banks.

On the other hand, the national authorities are now convinced they must use their discretionary powers to reinforce the minimum capital requirement at the systemic level, as it is considered necessary for emerging countries and/or banks having weaker banking practices. Let us grant that the current efforts by the authorities to build a super-index, in the same spirit as the American CAMEL, arrive at satisfactorily quantifying the shortcomings in banking practices. We may then ask how many more points of capitalisation are necessary for one point less in CAMEL, and, primarily, if we are convinced that stricter capital requirement can offset weaker banking practices. The less the authorities are convinced of this trade-off, the more Ptolemaic and costly the regulation is bound to become. In my opinion, the recent proposal to require capital also for operational risks is a clear demonstration of this trend. I would at this point suggest the serious consideration of another risk to be covered with capital, namely the regulatory risk.

Focusing on banking practices rather than the social costs of failure, our current regulation proves to be based on a micro-partial approach and two questionable ideas, namely that adopting the best practices no serious systemic risks emerge, and that the regulators know more about banking practices than bankers. We share the belief that the Basle pillars have pushed banks to improve their risk management and internal controls, but we think that the right incentives come from supervision, while minimum capital requirements have introduced serious distortions and a drive towards riskier assets.

Ironically enough, the latest proposals of the Basle Committee tend to decrease the effective levelling of the playing field, this time particularly among banks. Both the refinement of the existing scheme, by means of external ratings, and the futuristic adoption of internal models of risk assessment give larger banks additional advantages: they work with larger and rated customers and they have resources to build in-house models for risk evaluation. Furthermore, the larger discretionary powers now given to supervisors have a number of appreciable effects: first, the local authorities are empowered to use supervision as an instrument of industrial policy, with potential strong discriminatory and politically-oriented effects; second, the different strength and capability of national supervisors make of the international level playing field a mere catchword.

The present regulation therefore seems vitiated by an internal contradiction. If the capital ratio were geared to the individual and systemic social costs of failure, large banks and bank-oriented systems would suffer from competitive disadvantages. With the capital ratio set at a uniform and therefore arbitrary level, large banks are favoured and systemic risks are out of control. The proposed refinements, permitting internal ratings and overall evaluations of residual risks, widen this gap. In any case, effective competition is distorted and financial fragility is not seriously considered.

## 6. Regulation and competition at the international level

The situation looks even worse when we look at the combined effects of competition and capital requirements at the international level, and especially at the emerging economies. Some authors have stressed the perverse effects of this combination on bank risk-taking and financial fragility, even proposing a return to some form of structural regulation.<sup>2</sup> Others (Acharya, 2000) have shown that more international competition

<sup>&</sup>lt;sup>2</sup> See Hellman, Murdock and Stiglitz (2000) and the bibliography there cited.

may in fact produce a very bumpy playing field. Translated into crude terms, free competition does not offer equal opportunities without a level starting line; in particular, international banks may not force competition at home since they can exploit competitive advantages when operating in countries with weaker domestic banking systems.

The more recent experience of some liberalised Latin American banking systems seems to confirm these results, and offers additional interesting hints. Strong international banks enter these markets possessing a double advantage. A higher rating than indigenous banks means a lower cost of capital and funding, permitting them to select the best borrowers by means of lower prime rates than the domestic banks. Since local regulation normally exacerbates the Basle capital requirements and the related weights for risks, the international banks obtain important savings in costly capital requirements. Dynamically, this produces increasing advantages for foreign banks and a perverse distribution of risks among banks, since it is the weakest ones that take on the most risks. As a result, the local banks are forced to run more risks; alternatively, in the attempt to control them, they become less keen to finance the domestic economy. The international banks enter these markets not to boost competition, but for the fat margins they get, especially in the related businesses of portfolio management. Opening local markets to foreign banks does not seem to produce competition on margins but on risk sharing. Furthermore, judging from the level of interest margins and from their composition in terms of mark-up and mark-down, the countries that are home to the international banks often exhibit a low degree of bank competition.

What about reinforcing the basic Basle coefficients for weaker financial systems? The Basle Committee should consider Argentina as a paradise. All the prudential rules are applied, with more force than required by Basle, and supplementary rules have been devised and properly applied. Over the last few years the idea of reinforcing the Basle rules in countries with fragile financial systems has made great headway in Latin America. In Argentina we find that the minimum capital ratio is not 8% but 11.5%; a complex formula is then applied which includes interest and market risks, and a coefficient derived from a CAMEL type evaluation. Furthermore, the weights for credit risks are not related to large categories of assets but to the rates of interest charged on them, using a steeply increasing scale. We can grossly calculate a marginal capital coefficient that in normal times requires 30 cents of capital for 1 dollar of loans, and that in difficult times it simply means no more loans to the private sector. This does not look like a banking system that is going to help the economy to grow very much. But, does it at least minimise financial fragility? Unfortunately not, because regulation does not consider systemic risks, and Argentina has no room left in relation to exchange, monetary and budget policies, and not enough resources to fund a public scheme of deposit insurance. When the shock is of a macroeconomic character, capital requirements greatly reinforce the shock. The result is that when a downturn lasts more than six months, the banks' loanable capacity dries up and most of the bank assets become technically ineligible, with the members of the Supervisory Authority suddenly growing interested in how better to enjoy their roof garden.

## 7. Conclusions

According to an old dictum, banks live on cheap money, market power and high leverage. Higher competition tends to lessen the first two, capital requirements the third. It is only natural that when banks are expected to behave like any other firm, thus rewarding their capital accordingly, they react by trying to limit competition and take on more risks. On the other hand, if banks must do away with market power, our juvenile studies on capitalism remind us that in a competitive environment non-covered risks are the only source of profits. If regulators tax bank risks we are led to suppose that they, too, tend to put the whole blame for financial inefficiencies and instability on commercial banking, and would not object to a serious scaling down of its operations. Closer inspection shows that the current trend in bank regulation tends particularly to punish the small and local dimension of commercial banking.

Lacking the classical defences against systemic risks, the European approach to financial regulation seems to reinforce the shortcomings of so-called prudential regulation, i.e. partial analysis, no serious thought given to the fragility of the entire financial sector, inconsistency between competitive regulatory principles and systemic protection. The developing countries lack the resources to adopt efficient systemic defences in order to supplement a riskier microeconomic banking structure. Will the dominance of foreign banks be the only solution for them? On the factual side, there can be no gainsaying that the small and medium dimension, for banks, non-financial firms and countries, is not properly considered and represented where political regulatory decisions are taken.

Finally, the Basle rules produce distortions that are no less serious than those attributed to the former structural regulation. Excessive competition is no less harmful than low competition, the level playing field approach helps the large dimension and "too big to fail" results, capital crunches produce serious effects on the economy while the regulatory costs go on absorbing important resources in small banks. It is a matter for further research to verify if the new approach to regulation has also fostered an increase in the part of GDP absorbed by the financial system without bringing about a better distribution of risks and a proportionate increase in what James Tobin (1984) termed full-insurance efficiency.

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